

CLAIMS:

1. An additive composition comprising:
 - (a) at least one first phosphorus- and boron-containing dispersant in an amount of about 20 wt% or more in the additive composition;
 - (b) at least one second boron-containing dispersant, free of phosphorus; and
 - (c) at least one detergent.
2. The additive composition of claim 1, wherein the first dispersant comprises a phosphorylated and boronated polyisobutylene succinimide, bis-succinimide, or mixture thereof.
3. The additive composition of claim 2, wherein the polyisobutylene has a molecular weight of about 900 amu.
4. The additive composition of claim 1, wherein the second dispersant comprises a boronated polyisobutylene succinimide, bis-succinimide, or mixture thereof.
5. The additive composition of claim 4, wherein the polyisobutylene has a molecular weight of about 900 amu to about 1300 amu.
6. The additive composition of claim 1, wherein the detergent comprises an overbased detergent.
7. The additive composition of claim 1, wherein the detergent comprises a sulfonate or a phenate.
8. The additive composition of claim 1, wherein the detergent comprises one or more of calcium sulfonate, magnesium sulfonate, sodium sulfonate, calcium phenate, and zinc phenate.
9. The additive composition of claim 1, wherein the detergent comprises a calcium sulfonate having about 1.5 wt% to about 20 wt% calcium.

10. The additive composition of claim 1, wherein the calcium sulfonate comprises a TBN of about 250 mgKOH/g to about 450 mgKOH/g.

11. The additive composition of claim 1, wherein the detergent comprises a calcium phenate having about 2.5 wt% to about 8.5 wt% calcium.

12. The additive composition of claim 1, wherein the detergent comprise a calcium phenate having a TBN of about 50 mgKOH/g to about 300 mgKOH/g.

13. The additive composition of claim 1, further comprising one or more of an antioxidant, an extreme pressure additive, a corrosion inhibitor, an antiwear additive, a metal deactivator, an antifoam agent, a viscosity index improver, a pour point depressant, an air entrainment additive, a metallic detergent, and a seal swell agent.

14. The additive composition of claim 1, wherein the additive composition is suitable for use in a transmission employing one or more of a slipping torque converter, a lock-up torque converter, a starting clutch and one or more shifting clutches.

15. The additive composition of claim 14, wherein the additive composition is suitable for use in a belt, chain, or disk-type continuously variable transmission.

16. A power transmitting fluid, comprising:

(a) a major amount of a base oil; and

(b) an additive composition comprising

(i) at least one first phosphorus- and boron-containing dispersant in an amount of about 2.0 wt% or more in the fluid;

(ii) at least one second boron-containing dispersant, free of phosphorus; and

(iii) at least one detergent.

17. The power transmitting fluid of claim 16, wherein the first dispersant comprises a phosphorylated and boronated polyisobutylene succinimide, bis-succinimide, or mixture thereof.

18. The power transmitting fluid of claim 17, wherein the polyisobutylene has a molecular weight of about 900 amu.
19. The power transmitting fluid of claim 16, wherein the second dispersant comprises a boronated polyisobutylene succinimide, bis-succinimide, or mixture thereof.
20. The power transmitting fluid of claim 19, wherein the polyisobutylene has a molecular weight of about 900 amu to about 1300 amu.
21. The power transmitting fluid of claim 16, wherein the detergent comprises an overbased detergent.
22. The power transmitting fluid of claim 16, wherein the detergent comprises a sulfonate or a phenate.
23. The power transmitting fluid of claim 16, wherein the detergent comprises one or more of calcium sulfonate, magnesium sulfonate, sodium sulfonate, calcium phenate, and zinc phenate.
24. The power transmitting fluid of claim 16, wherein the detergent comprises a calcium sulfonate having about 1.5 wt% to about 20 wt% calcium.
25. The power transmitting fluid of claim 16, wherein the calcium sulfonate comprises a TBN of about 250 mgKOH/g to about 400 mgKOH/g.
26. The power transmitting fluid of claim 16, wherein the detergent comprises a calcium phenate having about 2.5 wt% to about 8.5 wt% calcium.
27. The power transmitting fluid of claim 16, wherein the detergent comprise a calcium phenate having a TBN of about 50 mgKOH/g to about 300 mgKOH/g.

28. The power transmitting fluid of claim 16, further comprising one or more of an antioxidant, an extreme pressure additive, a corrosion inhibitor, an antiwear additive, a metal deactivator, an antifoam agent, a viscosity index improver, a pour point depressant, an air entrainment additive, a metallic detergent, and a seal swell agent.

29. The power transmitting fluid of claim 16, wherein the additive composition is suitable for use in a transmission employing one or more of a slipping torque converter, a lock-up torque converter, a starting clutch and one or more shifting clutches.

30. The power transmitting fluid of claim 29, wherein the additive composition is suitable for use in a belt, chain, or disk-type continuously variable transmission.

31. A continuously variable transmission fluid comprising

- (a) a major amount of a base oil; and
- (b) an additive composition comprising

(i) at least one first phosphorus- and boron-containing dispersant in an amount of about 2.0 wt% or more in the fluid;

(ii) at least one second boron-containing dispersant, free of phosphorus; and

(iii) at least one detergent.

32. A method of increasing steel-on-steel friction comprising: 

lubricating a transmission having steel-on-steel friction with a lubricating composition comprising a major amount of a base oil and an additive composition comprising:

(a) at least one first phosphorus- and boron-containing dispersant in an amount of about 2.0 wt% or more in the fluid;

(b) at least one second boron-containing dispersant, free of phosphorus; and

(c) at least one detergent.

33. A method of improving anti-shudder comprising: 

lubricating a transmission having shudder with a lubricating composition comprising a major amount of a base oil and an additive composition comprising:

- (a) at least one first phosphorus- and boron-containing dispersant in an amount of about 2.0 wt% or more in the fluid;
- (b) at least one second boron-containing dispersant, free of phosphorus; and
- (c) at least one detergent.

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34. A method of stabilizing steel-on-paper friction comprising:

lubricating a transmission having steel-on-paper friction with a lubricating composition comprising a major amount of a base oil and an additive composition comprising:

- (a) at least one first phosphorus- and boron-containing dispersant in an amount of about 2.0 wt% or more in the fluid;
- (b) at least one second boron-containing dispersant, free of phosphorus; and
- (c) at least one detergent.